

## REMARKS

This application has been reviewed in light of the Office Action dated August 27, 2004. Claims 1-36 are presented for examination, of which Claims 1, 13, 23, 33 and 35 are in independent form. Claim 11 has been amended to define still more clearly what Applicant regards as his invention; the changes made are neither intended nor believed to affect the scope of any claim recitation. Favorable reconsideration is requested.

Claims 1-32 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patents 5,982,937 (*Accad*) and 5,999,710 (*Smith et al.*) taken in combination, and Claims 33-36, as being obvious from those two patents in view of U.S. Patent 5,903,715 (*Sawano*). In this regard, Applicant notes that the beginning of the discussion of the prior art, at page 3 of the Office Action, is somewhat garbled, as the reference numerals and figures referred to do not correspond to what is in *Accad*; nonetheless, it is Applicant's understanding from the balance of this discussion that this is merely the result of typographical errors, and that *Accad* and *Smith* are indeed the basis of the rejection in question. If that is not the case, clarification is requested (if the next Action sets forth a different prior-art ground of rejection, of course, that Action must be non-final).

In general, when it transpires that it is necessary to output data of which the amount exceeds a memory capacity, it is naturally necessary to expand the memory capacity. The

present invention aims to make it possible to generate image data in such a situation without expanding the memory capacity, and also without having to accept deterioration of the data quality.

To achieve this, a print control apparatus according to the present invention is adapted to obtain system information from a host computer, analyze the obtained system information, compress necessary image data based on the analyzed result, and output the compressed image data to the host computer.

More specifically, independent Claim 1 is directed to a print control apparatus which can communicate with a host computer and an image output apparatus, and which comprises obtaining means for obtaining system information from the host computer, data generating means for generating second data which can be outputted from the image output apparatus from first data which is inputted from the host computer, and first data compressing means for generating third data by performing a data compression based on a first compression format to the second data.

Also provided are second data compressing means for generating fourth data by performing a data compression based on a second compression format different from the first compression format to the second data, and first output means for analyzing the system information which is obtained by the obtaining means and outputting the third or fourth data to

the host computer. First data decompressing means generate fifth data by performing a data decompression corresponding to the first compression format on the third data which is inputted from the host computer, and second data decompressing means generate sixth data by performing a data decompression corresponding to the second compression format on the fourth data which is inputted from the host computer. In addition, second output means output the fifth or sixth data to the image output apparatus.

In contrast, *Accard* and *Smith* relate to techniques for compressing image data, but do not disclose obtaining of system information from a host computer or output of compressed image data to a host computer, as recited in Claim 1.

More specifically, after carefully checking the contents of these references, Applicant could find only discussion of confirming after-compressed image data in a memory provided in a print control apparatus.

*Accad* relates to a technique of hybrid compression of raster data. Patches of connected pixels of a single color are identified in a raster page, and any patches of at least a predetermined size are subjected to lossless compression. Other patches, below that size, are subjected to a lossy compression. The ratio of lossless to lossy compression is maximized subject to the achievement of a targeted compression ratio. Even if a print job to be outputted is received from the host 10 (see Fig. 1 of *Accad*, and col. 5, lines 11-22), however, nothing has

been found, or pointed out, in that patent that would teach or even hint that any system data is received from the host, as is recited in Claim 1.

Moreover, nothing has been found or pointed out in that patent that is seen to teach or suggest that compressed image data is output to a host computer. On the contrary, in the *Accad* system, it appears that compressed image data is sent only to the print engine 70.

For both reasons, it is believed plain that Claim 1 is allowable over *Accad* taken alone.

Moreover, *Smith* is not believed to supply what is lacking from *Accad* as a reference against that claim. *Smith* relates to merge plane generation for purposes of color printing, in which lossy print data (e.g., for images) and lossless print data (e.g., for text) are processed separately. By separating these two types of data, actually lossy but visually lossless compression techniques can be applied to the lossy data, and lossless compression can be used for the text data. In this way *Smith* proposes to achieve high compression ratios without visible degradation in the image quality.

Again, nothing has been found, or pointed out, in *Smith* that would teach or suggest either obtaining system information from a host, as recited in Claim 1, or outputting compressed image data to a host, as is also recited in that claim. (The Office Action mentions storing image data in a host and obtaining that data from the host, but does not even assert that

system information is obtained from a host.) Even if *Smith* is deemed to show all that it is cited for, therefore, and even assuming that one of ordinary skill would actually be motivated to combine that patent with *Accad*, the result of such combination would not meet the terms of Claim 1.

Independent Claims 13 and 23 are respectively a method claim and a memory-medium claim corresponding to apparatus Claim 1, and are deemed allowable for the reasons presented above in connection with the latter claim. In addition, Claims 33 and 35 are respectively to a print control apparatus that cooperates with an apparatus like that of Claim 1, and to a system including both such apparatuses, respectively. These claims also are believed to be allowable for the reasons presented in connection with Claim 1.

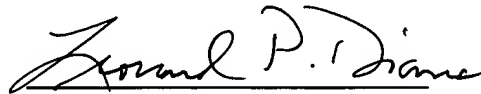
A review of the other art of record, including *Sawano*, has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application depend from one or another of the independent claims discussed above and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Leonard P. Diana", is written over a horizontal line.

Leonard P. Diana  
Attorney for Applicant  
Registration No. 29,296

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200

NY\_MAIN 467236v1